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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,368	02/08/2002	Ryusuke Hasegawa	H0002699 (4710)	1788

7590 03/17/2008
Staas & Halsy LLP
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EXAMINER

NGUYEN, TUYEN T

ART UNIT	PAPER NUMBER
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2832

MAIL DATE	DELIVERY MODE
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03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/071,368		HASEGAWA ET AL.	
	Examiner		Art Unit	
	TUYEN T. NGUYEN		2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7,8 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/6/2008</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-5, 7-8, 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 5, 8 and 13, applicant should clarify the structure/composition/arrangement of the magnetic core in order to have *a linear BH loop having a squareness ratio that approaches zero over a field strength range of approximately 15 to +15 oersteds, and has a constant permeability over a frequency range of about 1 to 100kHz.*

Regarding claim 14, applicant should clarify the structure/composition/arrangement of the magnetic core in order to have the center frequency shift of less, as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Nakagawa et al. [JP 06-151143] and Becker et al. [US 4,262,233 for motivation purpose].

AAPA discloses a bandpass filter having an inductor having a magnetic core having a linear BH loop [figure 3 of application].

AAPA discloses the instant claimed invention except for the specific of the magnetic core.

Nakagawa et al. discloses a magnetic core that consists essentially of an Fe-base amorphous metal alloy ribbon and having a permeability in a range of 400 to 1000 over a frequency range of 1 to 1000kHz [figure 2].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the magnetic core of Nakagawa et al. in AAPA for the purpose of improving magnetic characteristics.

AAPA in view of Nakagawa et al. discloses the instant claimed invention except for a non-gap core structure.

A non-gap core structure is obvious design consideration based on intended application/environment uses in order to control the magnetic field. Becker et al. shows a non-gap magnetic core [12].

Claims 1, 4-5, 7-8 and 11-13, as best understood in view of the rejection under 35 USC 112 second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Nakagawa et al. [JP 06-151143] and Becker et al. [US 4,262,233 for motivation purpose].

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AAPA discloses a bandpass filter having an inductor including a magnetic core having a linear BH loop having a squareness ratio that approaches zero over a field strength range of approximately -10Oe to +10Oe.

AAPA discloses the instant claimed invention except for the specific of the magnetic core.

Nakagawa et al. discloses discloses a magnetic core that consists essentially of an Fe-base amorphous metal alloy ribbon and has a *substantially constant* permeability over a frequency range about 1 to 1000kHz. Nakagawa et al. further discloses the core having a permeability in a range of 400 to 1000 over a frequency range of 1 to 1000kHz [figure 2].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the magnetic core of Nakagawa et al. in AAPA for the purpose of improving magnetic characteristics.

AAPA in view of Nakagawa et al. discloses the linear characteristics of the claimed invention except for the specified ranges of magnetic field [-15Oe to +15Oe]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a suitable range for magnetic fields applied and frequency applied, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

AAPA in view of Nakagawa et al. discloses the instant claimed invention except for the non-gap core.

A non-gap core structure would have been an obvious design consideration based on the intended application/environment uses in order to control the magnetic field. Becker et al. shows a non-gap magnetic core [12].

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5, 7-8, 11-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,930,581 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both claiming the same subject matter of a magnetic core having a linear BH loop having a constant permeability over a frequency range of about 1 to 1000 kHz within an applied field between -15Oe and +15Oe.

Allowable Subject Matter

Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is (571)272-1996. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TUYEN T NGUYEN/
Primary Examiner, Art Unit 2832